News Letter no 1 October, 1926

OBJECT OF CAMPAIGN

To bring high school and college mathematics teachers of Louisiana and Mississippi into closer professional contact through the medium of a common membership in the Mathematical Association of America.

CAMPAIGN ENDORSED BY:

Pres. T. D. Boyd, Louisiana State University.
Pres. J. R. Conniff, Louisiana Polytechnic Institute.
Pres. J. L. Johnson, Mississippi Woman's College.
Pres. Alfred Hume, University of Mississippi.
Pres. C. Cottingham, Louisiana College.
Pres. B. M. Walker, Mississippi A. & M. College.
Pres. E. L. Stephens, Southwestern Institute
Pres. V. L. Roy, Louisiana Normal College.
Supt. T. H. Harris, State of Louisiana.
Supt. H. M. Ivy, Mississippi Education Association, Meridian.
Prof. Dunham Jackson, Pres. M. A. of A.
Prof. W. D. Cairns, Sec'y. M. A. of A.
Prof. H. E. Slaught, Vice-Pres. M. A. of A.

Vols 1-3 complete

OFFICERS OF THE LOUISIANA-MISSISSIPPI SECTION

Prof S. T. Sanders, Chairman La.-Miss. Section, L. S. U. Baton Rouge, La.
Prof. J. A. Torrey, Vice-Chairman, University, Miss.
Prof B. E. Mitchell, Millsaps College, Sec'y-Treas.

WHAT SOME OF THE EDUCATIONAL LEADERS HAVE SAID ABOUT IT.

"Your letter of June 14th is at hand. We shall make every endeavor to get as many as possible to join the Mathematical Association of America this summer."

H. E. Buchanan,
Dept. of Math., Tulane University.

"I shall be very glad indeed to furnish the brief appeal that you desire sent to the mathematics teachers in the secondary schools whenever you so desire."

Nicholas Bauer.
Superintendent N. O. City Schools.

25-239

"I have done some missionary work in the Shreveport region and now that the rush of the final days of the long term is over, I hope to do my duty. The Head of the Department of Shreveport High School will be ready to throw his full weight into helping line up the high school teachers in our vicinity. I hope soon to have the names of all the secondary mathematics teachers in our region.

Jno. A. Hardin,
Dean Centenary College.

"I am very glad to give my endorsement of your campaign. As requested in your letter of the 28th, I am inclosing the sheet checked as you requested."

C. Cottingham,
Pres. Louisiana College.

"I most highly endorse your plans."

Robert Torrey,
Math. Dept., University of Mississippi.

"I have been greatly interested in what you are undertaking in behalf of mathematics and the teaching of it in this section, and I wish you unbounded success in this good work which deserves the hearty endorsement of all our mathematicians and teachers of mathematics."

Alfred Hume,
Chancellor, University of Mississippi.

"Replying to your letter of May 26th, allow me to say that I am sending back your list with my name checked and that I shall be pleased to do everything in our power to help bring about the effective cooperation of teachers of college and secondary mathematics through the medium of a common membership in the Louisiana-Mississippi Section of the Mathematical Association of America."

J. L. Johnson,
Pres. Mississippi Woman's College.

"Replying to your letter of April 9th relative to increasing the membership in the Louisiana-Mississippi Sectioon of the A., I wish to suggest that arrangements be made to publish a short article in each issuse of the Journal during the session of 1926-1927."

P. H. Griffith,
Sec'y Louisiana Teachers' Association,
Baton Rouge, La.

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"I wish to acknowledge receipt of your communication of the 21st ult., and shall be glad to have the opportunity of endorsing the campaign of your association to bring college and secondary mathematics teachers of the La.-Miss., territory into closer cooperation in their teaching work. Therefore, you may use my name as requested."

J. R. Conniff,
Pres. Louisiana Polytechnic Institute.

"I think you are entirely right in trying to create a mathematical interest and in appealing to mathematics teachers of the two states who are not now in the Association, but whose interest in mathematics and mathematical promise may be such as to make them eligible to membership."

B. M. Walker,
Pres. Miss. A. & M. College.

"I agree fully with all that you say in your letter and the members of the department here will be glad to cooperate as best we can. Within the next few weeks we shall make the best list we can of secondary teachers of mathematics in this part of the state and send the list to you."

"Your plan of sending to such teachers statements of the value of membership in the Association is, I feel confident, a good one; and it will bring worth-while results, I believe."

A. C. Maddox
Louisiana Normal College.

"We are very much interested in your project and will cooperate in every way possible for the advancement of the laudable purposes of your section of the Mathematical Association. I trust you will free to command our services at all times."

V. L. Roy,
President, State Normal College.

"This will reply to yours of the 12th instant. I agree with you fully that there should be the closest kind of cooperation and affiliation between the colleges and the high schools."

T. H. Harris,
State Sup't. Education

NEEDED!

Cash contributions from all possible sources to aid printing and mailing expenses of campaign.

Every college and university of Louisiana and Mississippi to pay the expenses of at least one delegate to the fourth annual meeting of the Louisiana-Mississippi Section of Mathematical Association of America to be held in Shreveport, the latter part of March.

Every parish school board of Louisiana and every county school board of Mississippi to pay the expenses of one delegate, a mathematics teachers, to the Shreveport meeting.

SOMETHING TO CONSIDER

The most serious responsibility which confronts college and high school mathematics teachers is the handling of the mathematics courses in such way as to secure a maximum of good to the undergraduate.

One could not properly estimate the teaching effectiveness and inspiration which would result from the annual coming together of even one-tenth of the college and secondary mathematics teachers of Louisiana and Mississippi if that tenth should consist of the leading teachers. The opportunity for just such coming together is afforded by the annual meetings of the Louisiana-Mississippi Section of the Mathematical Association of America.

A GOOD START

The Board of Trustees of Centenary College at its June meeting voted one hundred twenty five dollars ($125.00) toward the expenses of this campaign.

Professor J. S. Patton of Homer, Louisiana has expressed his belief that his own parish, Claiborne, would send a mathematics delegate to Shreveport, with expenses of delegate paid.

If every parish of Louisiana and every county of Mississippi would do likewise, the meeting in Shreveport would establish an unexamplied record in the annals of mathematics.

Our first message of the series, it is intended to send out to the mathematics teachers of Louisiana and Mississippi, is largely contained in the following extract from Professor Slaught's "Mathematics and the Public" as published in the First Yearbook of the National Council of Teachers of Mathematics. READ IT, and pass it on to your neighbor mathematics teacher if he or she should happen not to be on our mailing list.

Read it. Then, if inclined to do so, write the chairman at Louisiana State University what you think of it, and of the project. **It will help.**

From H. E. Slaught's "Mathematics and the Public" in The First Year Book of The National Council of Teachers of Mathematics 1926:

MATHEMATICS AND THE PUBLIC

(1) When it was decided that we must enter the World War, it was natural that mathematicians, along with other loyal citizens, should volunteer to assist in their special capacity, but they were told by the Secretary of War that there seemed to be nothing needed in their line. It was not long, however, before the government found that it did need the mathematicians, in fact, that it could not "carry on" without them in so important a matter as the effective development of the ordnance department. In a short time a corps of workers was organized under the leadership of a number of outstanding mathematicians and they speedily applied modern and powerful mathematical methods, both theoretical and practical, to those problems of ballistics which needed to be solved in order to properly equip our army. So effective had this service become at the time of the armistice, that the American forces were undoubtedly supplied with the best data of any of the armies for determining the effectiveness of gun fire. Other groups of mathematicians rendered similar effective service in developing submarine detection appliances. These two achievements were of vital importance in determining the outcome of the war and they revealed the power of mathematics in a most emphatic manner to the unsuspecting public.

(2) It came as a revelation to thousands of young men, many of whom had deliberately side-stepped all mathematical courses which they could possibly avoid in their school days, to find that those very courses were prerequisite to appointment or advancement as officers in either the army or the navy. It was a common experience to hear such men begging for the opportunity to enter classes in mathematics which they had previously ignored—and bragged about it too. The war served to elevate mathematics to a position of prominence not previously recognized by the casual public. This fact undoubtedly helped to swell the courses in mathematics in the colleges in the immediately succeeding years.

(3) But we are most interested in the arts and sciences of peace than in those of war. The example of the late Charles P.

Steinmetz, whose name was a household word wherever the mysteries of electricity were under consideration, was probably more effective than any other means in driving home to the man in the street the fact that mathematics underlies all present day mechanical and physical progress. Thousands of boys and young men to whom the name of Steinmetz was magic have found early in their efforts to become electricians that one could climb a pole and splice a wire without knowing any mathematics, but that any masterful knowledge of electrical science could be gained only by the road that Steinmetz traveled, namely, by hard study of higher and higher mathematics. It is well known that his development of the mathematics of the alternating current, involving as it did those phases of higher mathematics which no one could have surmised in advance would be involved, did more than all other causes combined to lay the foundation upon which the great structure of the General Electric Company was built.

(4) It is well understood that the Rockefeller Foundation is now devoting its efforts chiefly toward the promotion of public health throughout the world. To this end it has not only made large grants to medical schools but it has indirectly stimulated independent work in the medical field by providing liberal research fellowships in the underlying sciences, physics and chemistry,—in chemistry as fundamental to medical research, and in physics as fundamental to chemistry. But it is not so widely known that the Foundation has recently extended the range of these fellowships to include mathematics as fundamental to both physics and chemistry. This step was taken deliberately after most careful consideration of the claims of mathematics as the basic science in this field.

This claim would hardly be questioned by the physical scientists themselves and would readily be admitted by the public. For example, it is said of the late Professor Chandler, dean of the Columbia School of Mines, when in the early days he wanted more mathematics put into the curriculum for chemists and was opposed by the head of the department of mathematics, that he came into the faculty meeting with an armful of books and said: "These gentlemen, are important articles on chemistry which I cannot read because I do not know mathematics enough. We do not want our students to be in my predicament."

But the public would be staggered if such a claim were made for any of the biological sciences. And yet the writer knows a physician who is a diagnostic and research specialist of high standing, who besides his medical degree holds a Ph. D. in physiology

from Harvard University, and who is now pursuing courses in advanced mathematics because he is unable to continue his researches successfully without more power in this line.

A few years ago the Mathematical Association of America invited several specialists in other sciences to take part in a symposium on "Mathematics in Relation to the Allied Sciences," and we were no little suprised to learn from biologists and biologists and biometoricians the wide range of mathematical subjects used by them in their research work. For instance, Dr. H. B. Williams of the College of Physicians and Surgeons, said in substance: "The biological sciences in the main rest entirely upon the fundamental sciences of physics and chemistry with all the mathematical foundation which these sciences presuppose." He cited his own investigations on "nerve impulse" and those by Einthoven of Leyden on "heart action"which were possible only because of their being well trained in methods of mathematical investigation.

One could proceed indefinitely citing evidence of a consciousness on the part of the public gradually awakening to the fact that mathematics in a marvelous and powerful instrument in the hands of trained thinkers for accomplishing great results. One further illustration, more or less amusing, was observed in the attempts of the newspaper reporters and popular magazine writers to describe "in a few words" the Einstein theory of relativity, but who invariably took refuge in the excuse that it all rested on mathematics of a "higher" type than the readers could be expected to understand, and thus they were duly overcome with awesome respect both for relativity and for the underlying mathematics.

Finally, one other serious illustration of far-reaching significance should be mentioned. The great industries and large business corporations are coming to realize the importance of fostering research in connection with their special problems, and very many of them have established laboratories as regular departments of their activities. In numerous cases such organizations have found that mathematical research, usually of quite an elementary character but often far more intricate and technical than could have been predicted, has led to higher degrees of efficiency, to new phases of economy, and sometimes to complete reorganization of procedure. Many such corporations have become institutional members of the American Mathematical Society during the past two years, with the privilege of nominating to individual membership those represen-

tatives of their organizations who are interested and active in mathematics. This movement is bound to grow and to exert a continually widening influence in making mathematics known to and appreciated by the public.

One of the most significant evidences that the importance of mathematics is permeating the whole fabric of modern life is shown in the recent unparalleled development of the use of statistical methods in the study of quantitative relations in almost every department of investigation. This appears in the simplest form in all the proposed new curricula for the junior high schools. It is emphasized in the reorganized programs for the senior high schools. It is further developed in the enriched courses for college students not only in all the sciences but also in economics, sociology, anthropology, etc., and in most of the effective studies in education. It is indispensable in all laboratories everywhere, whether in the schools or in the factories, in commerce, in big business of every kind. In all such studies, if carried out to their fullest extent, it appears that the mathematics involved, while initially of the simplest nature, eventually becomes more and more technical and requires the most careful reasoning in order to insure correct and dependable conclusions. These are phases of mathematics which are gradually growing into the consciousness of the general public and which are capable of recognition and widespread understanding.

Address all Communications to Chairman,

S. T. Sanders, L. S. U.

Baton Rouge, La.

News Letter No. 2 November, 1926

MEMBERSHIP CAMPAIGN
of
LOUISIANA-MISSISSIPPI SECTION OF M. A. OF A.

OBJECT OF CAMPAIGN

To bring high school and college mathematics teachers of Louisiana and Mississippi into closer professional contact through the medium of a common membership in the Mathematical Association of America.

CAMPAIGN ENDORSED BY:

Pres. T. D. Boyd, Louisiana State University.
Pres. A. B. Dinwiddie, Tulane University.
Pres. J. R. Conniff, Louisiana Polytechnic Institute.
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Pres. E. L. Stephens, Southwestern Louisiana Institute.
Pres. V. L. Roy, Louisiana State Normal College.
Pres. Alfred Hume, University of Mississippi.
Pres. B. M. Walker, Mississippi A. & M. College.
Pres. J. L. Johnson, Mississippi Women's College.
Pres. L. T. Lowrey, Blue Mountain College.
Pres. G. S. Sexton, Centenary College.
Pres. D. M. Key, Millsaps College.
Pres. G. T. Gillespie, Belhaven College.
Supt. T. H. Harris, State of Louisiana.
Supt. H. M. Ivy, Mississippi Education Association, Meridian.
Supt. W. F. Bond, State of Mississippi.
Dean. J. A. Hardin, Centenary College.
Prof. Julia Dale, Delta State Teachers' College, Cleveland, Miss.
Prof. Mabel Hutchins, Math. Dept., Blue Mountain College.
Prof. C. D. Smith, Math. Dept., Louisiana College.
Prof. G. L. Harrell, Millsaps College.
Prof. Dunham Jackson, Pres. M. A. of A.
Prof. H. E. Slaught, Vice-Pres. M. A. of A.
Prof. W. D. Cairns, Sec'y-Treas., M. A. of A.
Sec'y P. H. Griffith, Louisiana Teachers' Association.
Prof. H. E. Buchanan, Math. Dept., Tulane University.
Prof. A. C. Maddox, Louisiana State Normal College.
Supt. Nicholas Bauer, New Orleans City Schools.
Prof. S. T. Sanders, Chairman, La-Miss, Section, L. S. U.,
Prof. Robert Torrey, Vice-Chairman, University of Miss., University Miss.
Prof. B. E. Mitchell, Sec'y-Treas., Millsaps College, Jackson, Miss.

Prof. Robert Torrey,
Prof. Mabel Hutchins,
Prof. J. A. Hardin,
Prof. C. D. Smith,
} Committee on Campaign Finance.

INSPIRING WORDS.

"I am in sympathy with the plan which you propose for developing interest in mathematics among teachers in this field. Tulane University will be willing to contribute $50.00 toward the expenses of an initial campaign such as you describe."—A. B. Dinwiddie, Pres. Tulane University.

"I see no reason why the mathematics teachers in our high schools and colleges in Mississippi and Louisiana should not have a common membership in the M. A. of A.

Co-operation of the right kind is always beneficial to the individuals taking part and also to the public."—W. F. Bond, Miss. State Supt. of Education.

"As one of my two major subjects in college was mathematics, I can appreciate the excellent work your Association is doing, to a greater degree perhaps than some who have not specialized in that subject.

Let me assure you of my interest in the work of your organization and of my thorough approval of it."—Lawrence T. Lowrey, Pres. Blue Mountain College.

"I am glad to tell you that I most heartily approve of this movement. I consider that such an association is very much needed, and that it will promote the interest of all of our schools and colleges."—G. T. Gillespie, Pres. Belhaven College.

"I am writing to express my most hearty commendation of the work which the Louisiana-Mississippi Chapter of the Mathematical Association of America is doing. The aim of the Association, the bringing of mathematics teachers, college and high school, of the two states into closer professional contact, is in my opinion very worthwhile and necessary.

The Head of the Mathematics Department at Centenary informs me that he is expecting to make the membership in the Association of his Department 100%,"—Geo. S. Sexton, Pres. Centenary College.

"I am greatly pleased at the interest in mathematics manifested in Louisiana and Mississippi during the past few years in the organization of a Louisiana-Mississippi Chapter of the Mathematical Association of America.

Please put me down as heartily approving the purpose and work of the Louisiana-Mississippi Chapter of the Mathematical Association of America."—D. M. Key, Pres. Millsaps College.

VOLUNTARY COMMENT

"I shall be glad to do anything that I can to assist in this most laudable undertaking, and, if possible, be present at the meeting in Shreveport in March."—G. L. Harrell, Registrar, Millsaps College.

"I assure you that I heartily endorse the movement you suggest. I shall be glad to use my influence in making the La-Miss., Section of the M. A. of A. a success."—Miss Mabel Hutchins, Math. Dept., Blue Mountain College.

"Such a campaign certainly has great possibilities for good. You may count on me for any service that I can render."—C. D. Smith, Math. Dept., Louisiana College.

FROM SOME OF THE PARISH SUPERINTENDENTS.

"We shall be glad to send all of our mathematics teachers to your annual meeting, which will be held in Shreveport the latter part of March."—R. V. Kerr, Bossier Parish.

"I shall gladly recommend to our Board the sending of a mathematics teachers as a delegate to the coming meeting in Shreveport next Spring."—Nicholas Bauer, Orleans Parish.

"Rapides Parish will be glad to send one or more representatives to the meeting of the Louisiana-Mississippi Section of the Mathematical Association of America at its meeting in March."—M. J. Avery, Rapides Parish.

"I received your communication in regard to the mathematics "Get together" meeting. I will take this matter under consideration, and if possible, have a representative at the meeting."—F. M. Coleman, Hinds County, Miss.

"I have yours of recent date relative to an annual "get-together" of the mathematics teachers of Louisiana and Mississippi. I shall take the matter up with my Board at its next meeting relative to having a delegate at this meeting."—W. B. Prescott, St. Landry Parish.

" I feel satisfied that the School Board would consider favorably the sending of one delegate from this parish."—C. E. Laborde, Avoyelles Parish.

OFFERINGS FOR SERIOUS THOUGHT

Of the twenty-odd outstanding educational leaders of the two states, fourteen college presidents and the two state superintendents of education have shown an administrative vision of the value of organized co-operative mathematics teaching and study.

They see what every earnest mathematics teacher sees. That increase in the effectiveness of high school and college mathematics teaching is bound to come if the thousand or more teachers of mathematics in the Louisiana-Mississippi Section territory can carry out the program of a yearly meet, and can otherwise profit from mutual professional contacts and from the stimuli of literature and personality furnished by the largest mathematical organization in the world, the Mathematical Association of America.

We have requested lists of high school mathematics teachers from all the parish superintendents of Louisiana and the county superintendents of Mississippi, about half of those addressed having replied. The result is about 500 names of secondary mathematics teachers listed in our office. We may assume, reckoning from this, that there are, at least, a thousand mathematics teachers in the high schools of both states. Estimating a hundred college mathematics teachers in state and private colleges, we may reasonably conclude that eleven hundred men and women are engaged in mathematics teaching in Louisiana and Mississippi. Of this 1100, exactly 50 are at present members of the Mathematical Association of America, that is, less than 5%. Now if what is asserted above is true, the conclusion is inescapable that a great opportunity lies before 95% of the mathematics profession in these two states. It is more than an opportunity. It is a challenge.

The barbers, the bricklayers, the bakers, the merchants, the manufacturers, the lawyers, and the doctors, all have their respective unions or associations and their annual meetings. Moreover, it is the exception when the majortiy of the members of a calling or a business are not identified with their own professional organization.

If the baker, the merchant, the lawyer, the doctor, acquire added efficiency by their yearly mutual contacts, can the mathematics teachers remain indifferent to a program which aims to bring a like benefit to those engaged in the profession of mathematics teaching?

The high schools, the tax-supported colleges, and the university of a state are maintained by the same group of tax-payers. Bill Jones is taxed to support the high school which his son John attends. The same Bill Jones is taxed to support the college which John will attend when he finishes high school. Yet Professor X who teaches John his high school algebra, and Professor Y who will teach him his college algebra have not even a professional acquaintance, much less a personal one. This is not all. These two men are apt to have different ideas about what value John is to derive from mathematical study in return for Dad's tax money. This is a situation which could be improved by mutual efforts of Professor X and Professor Y.

Now if there were only one Bill Jones, it would not matter much. But if only 50 out of the 1100 in the La-Miss. territory are members of the M. A. of A., then 95% of the daddies of Louisiana and Mississippi belong to the Bill Jones class, that is, their sons and daughters have their mathematics taught them by Professors X of the high schools and Professors Y of the colleges who do not exchange ideas, are not members of the same mathematical organization, and may set forth ideas of mathematical values quite at variance with one another. Is this fair to the Bill Joneses who pay their tax-money for the best possible mathematics teaching?

Mathematics is the most fundamental of all the sciences. Gauss called it the "queen" of the sciences. More and more are its processes found essential to the final expression of research results in non-mathematical fields. Re-read Mr. Slaught's "Mathematics and the Public." An expert in soil research returned to his university after ten years absence in order to get certain mathematics necessary to his particular problem in agricultural physics. A man about to take his doctor's degree in law at Harvard went aside to study mathematics that he might bring mathematical method to his research in law and ethics. Examples like these can be multiplied indefinitely.

But the utility phase of mathematics—vast and far reaching as this is,— is probably less important than those disciplines to thought which we believe must always be yielded by a proper and sufficiently extended study of mathematics. The demonstration of this truth to the world might well motivate a move of a thousand mathematics men and women into common membership in the M. A. of A. in this Louisiana-Mississippi territory.

SOME NEWS MATTER.

We are doing our best to measure up to the responsibilty of this chairmanship, but we doubt if even our mathematical friends, much less the lay public, have a due appreciation of the difficulties we are encountering. However, we have the utmost confidence in the value of the project we are undertaking, and are equally confident that the great body of earnest mathematics workers, in college and high school, have the same vision, and that they are going to rally and make this Shreveport meeting the greatest of its kind in the history of the South. In the meanwhile, by correspondence and circularization let us continue to develop our corporate consciousness as a section territory of M. A. of A.

Prompt replies from some of our correspondents would speed up the campaign. We are making the most economical use of moneys sent us that we can, but more money will be necessary, if this project is to be mdae as scientifically thorough as it should be.

Endeavor is being made to secure the best possible program for our Shreveport meeting. Pres. Jackson of the national organization of the M. A. of A. and Prof. Slaught, managing editor of the American Mathematical Monthly have been requested to assist us in achieving this end.

Did you read the letter of Pres. Jackson of September, 10th, expressing the interest of the national Board of Trustees in our campaign efforts? If you have not done so, dig up this letter which was sent out with our October pamphlet and READ it. If you did not receive the letter, notify us, and we shall be glad to have it mailed to you.

Our last news item should be read with keen interest. So important is it, that we give it a separate paragraph:

The M. A. Board of Trustees voted to send a delegate to the Shreveport meeting, the expenses of this delegate to be paid from their own treasury.

OF POSSIBLE INTEREST.

1. If $2/7 + 3/7 = 5/7$ because 2 apples + 3 apples = 5 apples, then what does (2 apples) (3 apples) equal if $2/7.3/7 = 6/49$?

2. If $\frac{2 \text{ apples}}{7 \text{ apples}} = 2/7 = \frac{2 \text{ eggs}}{7 \text{ eggs,}}$ is 2 apples. 7 eggs=7 eggs. 2 apples?

3. (With a bow to the psychologist). If a student acquires the habit of accuracy in a mathematics class-room, how much of it will be carried over into the history class-room without effort? With effort?

4. How much good would a highly emotional type of mind derive from a thorough two-year course in mathematics, "good" being interpreted to mean a discipline?

5. (To college teachers). Is the term "infinity" necessary in the books on the elementary calculus? If unnecessary, is it advisable?

6. Every field of life is full of problems. Is there a scientific method of attacking every problem? Can the habit of attacking all problems scientifically be built up in the mathematics class-room, and carried over to every field?

7. How much of physics is mathematical? of chemistry? of economics? of sociology? of biology? of agriculture? of engineering? of accounting? of educational theory?

Address all communications to Chairman, S. T. Sanders, L. S. U., Baton Rouge, La.

News Letter no. 3 Dec. 1926

MEMBERSHIP CAMPAIGN
OF
LOUISIANA-MISSISSIPPI SECTION OF M. A. OF A.

OBJECT OF CAMPAIGN

To bring high school and college mathematics teachers of Louisiana and Mississippi into closer professional contact through the medium of a common membership in the Mathematical Association of America.

The campaign has been strongly endorsed by the following fifteen college and university presidents and educational leaders of Mississippi and Louisiana.

President Alfred Hume, University of Mississippi
President Thos D. Boyd, Louisiana State University
President A. B. Dinwiddie, Tulane University
President J. R. Coniff, Louisiana Polytechnic Institute
President C. Cottingham, Louisiana College
President E. L. Stephens, Southwestern Louisiana Institute
President V. L. Roy, Louisiana State Normal College
President B. M. Walker, Mississippi A. & M. College
President J. L. Johnson, Mississippi Women's College
President L. T. Lowrey, Blue Mountain College
President G. S. Sexton, Centenary College
President D. M. Key, Millsaps College
President G. T. Gillespie, Belhaven College
Superintendent T. H. Harris, State of Louisiana
Superintendent W. F. Bond, State of Mississippi.

SIGNIFICANT ANNOUNCEMENTS.

It has been thought best to fix the 1927 meeting of the La.-Miss. Section of the M. A. of A. for the dates *March 4, 5, Friday, Saturday,* instead of near the close of March as at first announced. These will be the dates and Shreveport will be the place, Centenary College and Dean Hardin, with the mathematics staff of Centenary College, being hosts of the occasion.

We are sure that every one of the nearly one thousand teachers and school officers to whom this news letter goes out will approve the selection of these dates. It assures us the presence and participation in the meeting of such national figures as Miss Marie Gugle, president of the National Council of Mathematics Teachers, Professor Raleigh Schorling, ex-president of the same organization, and Professor H. E. Slaught, distinguished author, and managing editor of the American Mathematical Monthly. It makes probable the presence of other mathematics teachers of national prominence, among them Professor W. D. Reeve,

of Columbia University, successor to David Eugene Smith, and Professor J. R. Clark, editor of "The Mathematics Teacher", official journal of the National Council of Mathematics Teachers.

Read Professor Slaught's Letter which in mimeograph form is sent out with this news letter. It needs but to be read in order to inspire, to challenge, to stir the truly progressive teacher of mathematics.

Shall we not rally—all of us, secondary and college teachers alike—and make the Shreveport mathematical conclave the greatest meeting of its kind in the history of the South?

Representing L. S. U. as a delegate to the Louisiana State Teachers' Association we prized highly our opportunity while in Alexandria of conferring personally with a number of the parish superintendents, and, especially the privilege of presenting our cause to the mathematics section of the L. T. A. Here are some decisions not hitherto announced.

Superintendent Lunsford, of Beauregard Parish, will recommend to his School Board that Professor W. C. Roaten, of DeRidder, be sent as a delegate to the Shreveport meeting.

Superintendent Patton, of Claiborne Parish, promises to recommend Prof. T. F. Wilbanks as a delegate.

Superintendent Read assured us that Union Parish will send a delegate.

Superintendent Linton of Madison Parish will recommend a delegate.

Superintendent C. L. Barrow, Tensas Parish, will recommend a delegate.

Superintendent A. H. Horton, Coushatta Parish, will recommend a delegate.

FROM LETTERS RECEIVED

From PROF. E. E. DEES,
Principal Ajax High School,
Marthaville, La.

"I have just read with interest your news-letter No. 2 and I feel that the right move has been made. I feel that a move like the one you have begun will cause many who are in authority to become more interested than they now are, and it will help us as teachers to put more stress on the all important subject (mathematics)."

From PROF. N. SMYLIE,

Belhaven College,
Jackson, Mississippi.

"I am glad to see accounts of the efforts to widen the M. A. of A. of Louisiana and Mississippi so as to include

the high school teachers of mathematics. I am sure that cooperation and united council will do much to standardize the teaching of this important branch of study in our schools and colleges."

From DEAN HARDIN,

Centenary College,
Shreveport, La.

"Prof. Hitt of Mississippi College expressed enthusiastic approval of our campaign and assured us that he would be at our meeting, bringing with him all other mathematics teachers he could get to come with him from that region. Dr. Walker, President of Mississippi A. & M. College is in thorough sympathy with every feature of the campaign. . . . President Key of Millsaps expressed hearty approval of the work, and stated that the college would help to pay the expenses of Dr. Mitchell to the Shreveport meeting, and that Dr. Mitchell was enthusiastic over the prospects."

A unique and highly gratifing communication comes from Prof. Mary Spencer of Sophie Newcomb Memorial College in the form of, (1), a check for $5.00 to be applied to campaign expenses, (2), the following clipping: "To bring high school mathematics teachers of Louisiana and Mississippi into closer professional contact through the medium of a common membership in the Mathematical Association of America."

NO RESPONSIBILITY GREATER THAN THAT OF THE TEACHER OF MATHEMATICS

In the minds of many mathematical leaders research is one of the final goals of the mathematical worker. But, prior to research and basic to it *are the mathematical programs of high schools and colleges.*

Just as every industry is fed, ultimately, by the basic industry, agriculture, so the field of mathematical research is recruited, ultimately, from the very much larger class of elementary mathematical workers.

To the extent that effective teaching in the mathematics field is more difficult than effective teaching in the fields of language, history, or applied science, to the same extent is more importance to be attached to frequent contacts and conferences between mathematics teachers.

Both high school and college mathematics instructors are faced everywhere with the problem of so using the mathematical course material that the largest possible number of minds of the *average* type of ability shall receive a benefit, either in the uses and applications of mathematics or in some form, or forms, of mental discipline.

The great number of failures which occur in the fresh-

man mathematics are due to a complexity of causes, among which are: (a), the lack of proper correlation between the secondary school program and the college programs, (b), the superior weight in the students' opinion of other programs than the academic, (c), insufficient motivation of the students in mathematical directions, (d), the undervaluation in many quarters of mathematical study, (e), others easily catalogued.

In view of these facts the conclusion is inescapable that the greatest forward step which could be taken by the mathematicians and the mathematical teachers of this La.-Miss. territory is to associate themselves in an effort to diminish, if not remove altogether, these causes of mathematical wasteage.

Responding to Some Inquiries

1. Any teacher of mathematics may secure membership in the National Council of Teachers of Mathematics by paying $2.00 per year. This payment entitles the member to a year's subscription to "The Mathematics Teacher," which is the official journal of the Council. Communications regarding membership may be made to Prof. John R. Clark, of the Lincoln School, New York.

2. Any teacher of mathematics who is interested in the collegiate field (why should not all secondary mathematics, as well as college teachers be interested in collegiate field?) may become a member of the M. A. of A., by paying $2.00 initiation fee for the first year of membership and $4.00 for the first year of membership and $4.00 each succeeding year. Communication regarding membership may be made with Prof. W. D. Cairns, Oberlin, Ohio.

3. Any teacher of secondary mathematics who desires membership in both The National Council of Mathematics Teachers and the M. A. of A., at one and the same time, has only to pay $4.00 per year for membership in the M. A. of A., and $2.00 per year for membership in the National Council of Mathematics Teachers. This means, in effect, that the secondary teacher who desires membership in both organizations is not required to pay an initiation fee to the M. A. of A. In this case, both the "Mathematics Teacher," and "The American Mathematical Monthly" are sent to the member, the latter being the official organ of the M. A. of A.

4. If any mathematics teacher of Louisiana or Mississippi decides to join the M. A. of A., he may secure a membership blank by requesting same from Chairman Sanders, L. S. U., Baton Rouge, La.

Address all communications to Chairman S. T. Sanders, Louisiana State University, Baton Rouge, La.

Supplement to No 3

To the Teachers of Mathematics in Louisiana
and Mississippi.

Dear Colleagues:-

The National Council of Teachers of Mathematics is a federation of organizations of secondary teachers all over the United States. Its official journal is the "Mathematics Teacher," which is devoted entirely to the interests of mathematics in Junior and Senior High Schools.

The Mathematical Association of America is a similar organization devoted to the interests of mathematics in the collegiate field. These two great bodies have many interestsin common and it is very desirable that secondary and collegiate teachers should meet together at least once a year to discuss matters of mutual importance.

The annual meeting of the National Council will be held at Dallas, Texas, on February 28, 1927, and several of its officers and prominent members have agreed to stay

The annual meeting of the National Council will be held at Dallas, Texas, on February 28, 1927, and several of its officers and prominent members have agreed to stay over and help organize a branch among the high school teachers of Louisiana and Mississippi if that meeting can be held on March 4, 5, 1927, and if there is reasonable assurance of a large and representative attendance.

Such a meeting conjointly with the Louisiana-Mississippi Section of the Mathematical Association of America would establish a record of which all could well be proud, and its effect on the morale of all teaching mathematics in these two states would be magnetic--it would inaugurate a professional consciousness and an esprit de corps not hitherto dreamed of.

The only conditions of membership in the Council is the $2.00 subscription to the "Mathematics Teacher." For the Association there is a $2.00 initiation fee besides the $4.00 annual dues, but the Trustees of the Association have voted to remit the initiation fee to any member of the Council who wishes to join the Association.

By this generous arrangement, it will be possible for the Council and the Association to meet in joint sessions and for each to consider and profit by the problems of the other, and above all, to cultivate mutual acquaintance and derive mutual inspiration from such contacts.

I am sure it will be an immediate inspiration to meet and hear such active workers as Miss Marie Gugle, president of the National Council, who is assistant superintendent of schools in Columbus, Ohio, and Professor Raleigh Schorling, ex-president of the Council, principal of the University High School of the University of Michigan, both of whom have promised to attend this meeting, and I have no doubt that several others will also join us when they learn about it, for instance, Professor John R. Clark, of the Lincoln School, New York, who is editor of the "Mathematics Teacher," and Professor William D. Reeve who is the successor to David Eugene Smith at Teachers' College, Columbia University, both of whom invariably attend the National Council meetings.

successor to David Eugene Smith at Teachers' College, Columbia University, both of whom invariably attend the National Council meetings.

I expect to be there, as the representative of the Mathematical Association, and I hope to meet you all at that time. You will greatly assist the Chairman of the Section, Professor S. T. Sanders of Louisiana State University, if you will send to him at once any questions, which you would like to have discussed at this meeting, and any suggestions as to those who might take part in any discussion.

Anticipating great pleasure in meeting you all at Shreveport, I am

Yours sincerely,

(Signed) H. E. Slaught,
University of Chicago.

NEWS LETTER No. 4.

Jan 1927

ANNUAL MEETING

...of...

Louisiana-Mississippi Section of Mathematical Association of America

MARCH 4-5, 1927

SHREVEPORT, LOUISIANA

A Challenge to Forward-looking Mathematics Teachers in the Colleges and the High Schools of Louisiana and Mississippi.

ANNUAL MEETING

...of...

LOUISIANA-MISSISSIPPI SECTION OF MATHEMATICAL ASSOCIATION OF AMERICA

March 4-5, 1927

Shreveport, Louisiana

In less than seven weeks Louisiana and Mississippi mathematicians will be moving by train or by automobile to Shreveport to participate in what, it is hoped, will be one of the largest and most significant gatherings of its kind in the history of the country. It is reasonably certain that a more thoroughgoing organized effort to develop and crystallize a corporate professional mathematical consciousness in a territory as large as Louisiana and Mississippi has never before been attempted.

Assuming that we shall be able to find some way of financing a fifth news letter—one for February, by March 1 there will have been mailed out from Baton Rouge nearly six thousand communications (of one sort or another), communications bearing directly on the purposes of the campaign, namely, (1), to increase as much as possible the paid-up memberships in the Louisiana-Mississippi Section of the Mathematical Association of America, (2), to effect a closer professional contact between the high school teachers and the college teachers of mathematics. The definite means for bringing about the latter result has already been named in a previous news letter, as well as in the letter from Professor Slaught, and is further described in a paragraph below where its values are also stressed.

The February News Letter

The February News Letter will be of the greatest importance. It will contain the complete Shreveport program, and other information of value to those planning to attend the convention. While the program, in its entirety, is not yet ready for publication, the announcement now of two or three of its features should be stimulating to all forward-looking mathematicians and mathematics teachers of Mississippi and Louisiana.

Shreveport Chamber of Commerce to Banquet Visiting Mathematicians and Mathematics Teachers Friday Night, March 4, 1927.

A recent letter from Dean Hardin, of Centenary, contains the following information: "The Shreveport Chamber of Commerce considers our movement and our organization of such importance that they will be glad to give a banquet to all the delegates on Friday night, March 4." What eloquent testimonial this to the remarkable civic spirit of the city of Shreveport, and to the high valuation by its people of the purposes of this campaign!

H. E. Slaught to Speak on "Mathematics and Sunshine"

Professor Slaught, founder of the Mathematical Association of America, managing editor of the "*American Mathematical Monthly*", professor of mathematics at the University of Chicago, and accounted one of the foremost, if not the very foremost, among mathematics teachers of America, will deliver the principal after-dinner address of Friday evening, March 4th. He will speak on "Mathematics and Sunshine." Those who have heard Mr Slaught know well his ability to set forth with almost unequalled skill the charm, the beauty, and the power of mathematics.

President Marie Gugle of the National Council of Teachers of Mathematics to be Present.

Miss Marie Gugle, president of the National Council of Teachers of Mathematics, leading figure in the field of secondary mathematics, author of standard textbooks, will give a lantern slide lecture on "Dynamic Symmetry", and will also direct the part of the program which will be concerned with the establishment and launching of a chapter of the National Council.

Ex-President Raleigh Schorling of National Council to Address the Shreveport Convention of Mathematicians.

Professor Raleigh Schorling, a past president of the Council, member of the teaching staff of the University High School, University of Michigan, and one of the present leaders in the movement towards unified high school courses in mathematics, will discuss on Friday afternoon the topic, "How to Improve Accuracy in the Use of the Fundamentals."

Editor Clark of the Mathematics Teacher to Participate in the Program.

Editor Clark of the *Mathematics Teacher* in a note to the chairman says, "I think I shall be able to attend the meeting at Shreveport." His topic will probably be announced in the February News Letter.

Chapter of the National Council for Louisiana-Mississippi Territory.

There is strong promise that, under the management of President Gugle, a chapter of the National Council will be organized at Shreveport, and that it will be so articulated with the Louisiana-Mississippi Section of M. A. of A. that the Section and Chapter shall have their yearly meetings at the same time and in the same place, and in such a manner as to permit the freest possible interchange of viewpoints and information between the two great classes of mathematics teachers. Here are

Some Advantages of Such an Arrangement.

(1) A widened and deepened sense of the underlying unity in aims and purposes in the college and the secondary mathematics teaching.

(2) Yearly professional and personal contacts between the younger and the more aspiring mathematics teachers and the more mature and definitely successful figures of the mathematical world.

(3) Annual opportunity for the secondary teacher to get the helpful message from outstanding teachers in the secondary world.

(4) Annual opportunity for the secondary teacher to carry back to his or her class room fresh conceptions of the interrelations of the secondary and the college mathematics fields, and hence to increase effectiveness of teaching.

(5) Annual opportunity of the college mathematics man to get first hand acquaintance with some of the real difficulties encountered by even the best high school teachers in their efforts to sow the beginnings of mathematics in the adolescent mind while, in many cases, they are expected to teach other subjects in addition to mathematics.

(6) Annual opportunity of the high school and the college mathematics teachers to promote a joint and vigorous program, aiming to reduce such deficiencies as those indicated below in Professor Smith's investigations.

(7) Annual opportunity for the Louisiana-Mississippi Section to absorb into its membership those high school teachers who, having been inspired to join the M. A. of A. through observing its activities, have come to desire a participation in those activities and to know more and more of that wonderful science to whose teaching their lives are devoted.

A Stern Challenge to High School and College Mathematics Teachers.

In a recent study I found the following situation among college freshmen. Last year the Iowa Placement Test MT-1 was given to a sample of 1534 freshmen engineers in 18 engineering schools located in various parts of the United States. The following table gives a sample of representative questions with the per cent of students who missed each item.

Divide 5/7 by 6/11	25
Multiply 2 1/2 by 3 1/4	35
What per cent of 2 is 3/4	78
How many factors has 2ad.	45
If a and b are integers and their product is a/b, what is b numerically?	88

These are only a few of the questions given to show the range of error in a series of 75 questions of this general nature.—Studies by Prof. C. D. Smith.

Some Recent Communications.

Lake Providence, Louisiana,
January 6, 1927.

Dear Prof. Sanders:-

I have just talked to Supt. Warlick of East Carroll and he has readily consented to send a delegate to the Convention in Shreveport on March 4th and 5th. I do not know just yet who will go, but, if possible, I will go myself. Hoping that the meeting will be a success and that I may have the pleasure of meeting all you people there, I am,

Very truly yours,
GUY H. SOMMERS.

University P. O., Miss.,
January 17, 1927.

Dear Professor Sanders:-

Your letter of the 12th has been read with much interest and pleasure. I thank you for it.

I feel sure that we shall be represented at the next meeting.

Very sincerely yours,
ALFRED HUME, Chancellor.

State Normal College.

Dear Mr. Sanders:-

I read your letter of January 3rd with a great deal of interest. The State Normal College will be glad to send Professor A. C. Maddox, head of our department of mathematics, and Assistant Professor Leora Blair to the Shreveport meeting of the Louisiana-Mississippi Section.

Very sincerely yours,
V. L. ROY, President.

Miss. A. & M. College,
A. & M. College, Miss.

Dear Mr. Sanders:-

I am in receipt of your esteemed favor of January 13 relative to the annual meeting of the Louisiana-Mississippi Section of M. A. of A. I am glad to advise that this institution will have a representative at that meeting. If I cannot come myself I will have our Professor of Mathematics, Mr. Hal Fox, to represent the institution.

I certainly congratulate you upon the splendid work that you have done to further the cause of mathematics and the teaching of mathematics through the agency of this association during the past year. While my duties are so very pressing it is not possible for me to take the time that I would like to devote to the further study of mathematics and mathematical work, but my interest is none the less keen in this field, and I shall be glad at all times to do what I can in the great cause of mathematics and the teaching of mathematics in the south.

I am, with great respect,

Yours very truly,
B. M. WALKER, President.

Louisiana Polytechnic Institute,
Ruston, Louisiana.
January 14, 1927.

Dear Mr. Sanders:-

I wish to acknowledge receipt of your letter of the 12th instant and am glad to inform you that the Louisiana Polytechnic Institute will be represented at the meeting of the M. A. of A. in Shreveport on March 4-5, 1927.

Yours truly,
JNO. R. CONNIFF, President.

Louisiana College,
Pineville, Louisiana.
January 14, 1927.

My dear Mr. Sanders:-

I am in receipt of your letter of 12th and will say in reply that we shall be very glad, indeed, to pay the expenses of Prof. C. D. Smith, head of our Mathematics Department, to the meeting in Shreveport.

I greatly appreciate the work that you men are doing to increase the interest in mathematical study, and you may count on me to help in any way that I am able. Very Sincerely,

C. COTTINGHAM, President.

Bastrop, Louisiana,
January 10, 1927.

Dear Sir:-

I am enclosing a check for two dollars ($2.00) for membership in the National Council of Teachers of Mathematics. I expect to attend the meeting in Shreveport in March.

Yours truly,

LILLIE GREENE.

Vinton, Louisiana,
January 8, 1927.

Dear Sir:-

Enclosed please find check for two ($2.00) dollars for membership in the National Council of Teachers of Mathematics and their official journal for the current year. Yours truly,

J. M. BOYET.

Meridian, Miss.,
January 18, 1927.

Dear Mr. Sanders:-

I desire to join both the "National Council of Teacher of Mathematics" and the M. A. of A.

Kindly send me a membership blank.

If possible I expect to attend the meeting of the Council in Shreveport in March. Respectfully,

IDA K. SMITH,
Head of Mathematics Department in Meridian High.

From Maj. J. P. Cole, L. P. I. "I hear favorable comment on all sides about the meeting in Shreveport. Our entire staff will be there."

Send your campaign checks and other forms of encouragement to

S. T. SANDERS, *Chairman*
LOUISIANA STATE UNIVERSITY,
BATON ROUGE, LOUISIANA

Feb.-March 1927

THIRD ANNUAL MEETING

of the

Louisiana-Mississippi Section

of the

Mathematical Association of America

MARCH 4th, 5th, 1927

at

CENTENARY COLLEGE

SHREVEPORT, LA.

The Material of this News Letter with the Accompanying Program is Seriously Commended to the Attention of

College and High School Mathematics Teachers
County and Parish Superintendents
College and University Presidents
of the Two States, Mississippi and Louisiana

The Program

Scarcely in the history of the South has any mathematical program featured an array of minds as brilliant as those dated for participation in the meeting of the Louisiana-Mississippi Section of the Mathematical Association of America at Shreveport, March 4th, 5th.

We have thought it desirable to offer readers of News Letter No. 5, mathematicians, and mathematics teachers of our Section, biographic details about the men and women whose names appear on the accompanying program.

Herbert Elsworth Slaught, professor of Mathematics in the University of Chicago, universally regarded as one of the great mathematics teachers of America, played so determining a part in the organization of the Mathematical Association of America that his mathematical intimates speak of him as the "Daddy" of the Association, the mathematical public in general referring to him as its founder. His doctor's degree is from the University of Chicago. His identification, first as a student then as a member of the mathematics staff of U. of C., one of the greatest mathematical centres of the world, dates from the opening of the University in 1892. He has been for years managing editor of "*The American Mathematical Monthly*" and is the author of several mathematical texts. On the other hand, his ability for organizing and promoting practical projects looking to the popularizing of mathematics and to the deepening of the public's appreciation of its values is not at all inferior to his scholarship and ability as a mathematician.

Miss Marie Gugle, assistant superintendent and supervisor of junior and senior high schools of Columbus, Ohio, has for years exercised a commanding influence on methods and curricula in secondary mathematics school work. Holding for thirteen years the place of assistant superintendent of the Columbus schools and for the last six years that of secretary of the Mathematics Section of the Central Association of Science and Mathematics Teachers, with a Master of Arts degree from Columbia University, her leadership in

the secondary mathematics field was recognized when she was recently made president of the National Council of Teachers of Mathematics. She is the author of "*Modern Junior Mathematics*". Her illustrated lecture, "*Dynamic Symmetry*", alone will be worth the time and expense required for the Shreveport trip.

Professor W. D. Reeve, who speaks Saturday morning on "*What Mastery We Should Expect in Mathematics*", is one of the best equipped men in the country for speaking with authority on both matter and method in the field of mathematics. Graduating from the University of Chicago, he taught, first, in its High School, and then was made head of the Department of Mathematics in the University of Minnesota High School. After receiving the Ph. D. degree from the University of Minnesota, he was recently called to take a place on the mathematics staff of Teachers College, Columbia University—a college which every year probably sends out more mathematics teachers than any other teachers college in America. He is the editor of the second Handbook of the National Council of Teachers of Mathematics.

The career of **Professor Raleigh Schorling** bears a resemblance to that of Professor Reeve. Trained at the University of Chicago, graduating therefrom he taught in the University of Chicago High School, from which he went to the headship of Mathematics in Lincoln School, Columbia University. From Lincoln he went to the supervisorship of mathematics in the University of Michigan High School, a position which he now holds. His capacity as leader and scholar has been recognized in that he holds an associate professorship in the University of Michigan and was honored with the presidency of the National Council of Mathematics Teachers, prior to the election of Miss Gugle to that office.

Professor John R. Clark is editor of *The Mathematics Teacher*, official journal of the Council of Mathematics Teachers, the livest and most widely influential secondary journal in the world. The editorial skill and mathematical enthusiasm of Mr. Clark are evident to every thoughtful reader of this magazine.

Mr. W. C. Roaten of DeRidder, Louisiana, is generally acclaimed in this State as one of its very best teachers. He is

a B. S. graduate of Western Kentucky State Normal, has taught for thirty years in the Louisiana schools, was a high school principal for twenty years. Several of the leading institutions of the State have called him to teach in their summer sessions. His effective work in tenth grade mathematics has been widely recognized.

Professor A. C. Maddox, head of the Department of Mathematics at Louisiana State Normal College, is a key man in Louisiana mathematical work, since it is his institution which does the largest amount of teacher training work that is done in Louisiana. His intimate acquaintance with the college mathematical field on the one hand (he holds a Master's degree from Columbia University) and his experience in correlating the secondary with the college programs on the other, make it reasonably certain that his paper, "*Maximum Efficiency in Mathematics Teaching*" will have keenly attentive hearing by both high school and college teachers of mathematics.

Professor Julia Dale will read one of the strictly mathematical papers to be offered. She is head of the department of mathematics at Mississippi Delta State Teachers College, Cleveland, Mississippi. After teaching for three years in the University of Missouri, she was appointed fellow in mathematics at Cornell University where she received her doctor's degree in 1924. Her paper will discuss "*Application of the Exponential Mean to Fourrier Series*".

Mr. L. S. Frierson, for thirty years a student of magic squares, and a writer in that field, will furnish a twelve minute paper on this fascinating subject.

Dr. I. Maizlish, member of the Mathematics and Physics Departments of Centenary College, has a Ph. D. degree from the University of Minnesota and B. S. and M. S. degrees from the Massachusetts Institute of Technology. His published researches have been in the field of mathematical physics. He is a member of several scientific societies. The vigor with which he is carrying out the project of a mathematical exhibit for the Shreveport meeting promises the same high degree of success that has marked his scientific work. He will discuss "*Some Applications of Certain Functional Equations*".

Dr. H. L. Smith of the Louisiana State University mathematics department, one of the strongest of America's younger group of research mathematicians, holds M. S. and Ph. D. degrees from the University of Chicago. His published papers in the analysis field are found in *"Transactions of the American Mathematical Society"*, *"The Annals"*, *"American Journal"*, and *"National Academy of Sciences"*. He will discuss at Shreveport, *"A Substitute for Duhamel's Theorem"*.

SAVING EXPENSE ! !

The following table of estimates is offered for their consideration to those mathematics teachers planning to attend the Shreveport meeting, March 4th, 5th. The estimate is furnished by Mr. E. R. Stoker of L. S. U. Mathematics Department.

Based on mileage compiled by the Southern Map Co. and allowing fifteen miles to one gallon of gas, two quarts of oil per hundred miles, and four passengers per car, the approximate cost per passenger from the following points for a round trip is:

Baton Rouge	$\frac{246}{15} \times \$\ \frac{.18}{1} \times 2 + \$2.50$ (oil)	$\div 4 =$	\$2.10 Approx. each
Lake Charles	$\frac{225}{15} \times \frac{.18}{1} \times 2 + \$2.50$ "	$\div 4 =$	\$1.65 "
New Iberia	$\frac{232}{15} \times \frac{.18}{1} \times 2 + \$2.50$ "	$\div 4 =$	\$2.01 "
Lafayette	$\frac{207}{15} \times \frac{.18}{1} \times 2 + \$1.50$ "	$\div 4 =$	\$1.62 "
Crowley	$\frac{213}{15} \times \frac{18.}{1} \times 2 + \$1.50$ "	$\div 4 =$	\$1.65 "
Monroe	$\frac{115}{15} \times \frac{.18}{1} \times 2 + \$1.00$ "	$\div 4 =$	.94 "
Alexandria	$\frac{125}{15} \times .18 \times 2 + \$1.25$ "	$\div 4 =$	\$1.06 "
Ruston	$\frac{83}{15} \times .18 \times 2 + \$1.00$ "	$\div 4 =$	.75 "

One-and-One-half Fare on All Interurban Transportation Company Lines, Stewart's and Pelican Lines, Tri-State Transit Co., Motor Transit Co., Hammond State Lines, Yellow Bus Line.

Interurban Transportation Company will allow a one-and-one-half round trip fare to all mathematics teachers going to the annual meeting of the Louisiana-Mississippi Section of M. A. of A. which is held in Shreveport March 4, 5, 1927. We assure the mathematics teachers of Louisiana that all other bus lines operating in the direction of Shreveport will make the same concession. Furthermore, if not less than twelve mathematics teachers express their desire to Chairman Sanders to travel in a special bus going from Baton Rouge to Shreveport, the bus companies agree to furnish to that many a special bus. This proposition will also apply to Lake Charles, Lafayette, Monroe, Ruston, Alexandria, DeRidder, Vicksburg and Natchez. At any rate, it is to be understood that even if no special bus is furnished that a concession of the round trip one-and-one-half fare is authorized to all mathematics teachers going by bus to the Shreveport meeting.

Thirty passengers can be carried comfortably in one bus.

Signed: M. W. WALKER, *President*,
Interurban Transportation Company.

MATHEMATICS TEACHERS ATTENTION !

ILLINOIS CENTRAL SYSTEM

Baton Rouge, La., February 9th, 1927.

Prof. S. T. Sanders,
City.

Dear Sir:

Referring to our conversation in regard to securing reduced rates to Shreveport, La., for the Mathematics Convention March 4, 5, 1927:

In case you fail to secure the required number in attendance for this meeting which would entitle the delegates return rates, they could avail themselves of *party rates* from practically all points within the State of Louisiana which party rates are on *sale daily* with return limit five days from date of sale, and require twenty-five or more on one ticket going and returning. *Fare one-and-one-third for the round trip.*

Yours truly,
J. P. NORRIS, *Ticket Agent.*

IN EXPLANATION

(1) Mathematics teachers, college or high school, desiring to attend the Section meeting March 4, 5, may reach Shreveport

(*a*) by train,
(*b*) by car,
(*c*) by regular bus,
(*d*) by special bus.

(*a*) There should be at least twenty-five mathematics teachers in New Orleans who will go to Shreveport. Twenty-five or more New Orleans mathematical people, acting collectively, may each save two-thirds of one fare by going on a *party* ticket as per the announcement above by Mr. J. P. Norris, agent at Baton Rouge.

(*b*) For those going from points not too distant from Shreveport the four-in-an-auto plan as figured above by Mr. Stoker, would heavily reduce traveling expense.

(*c*) Any mathematics teacher of Louisiana or Mississippi will be allowed a one-and-one-half round trip fare to Shreveport for the purpose of attending the Louisiana-Mississippi Section meeting March 4, 5, by any of the bus systems named above in President Walker's statement. This concession holds regardless of the number of teachers who may take advantage of it and is good on regularly scheduled buses. Teachers using this concession should be prepared to identify themselves as teachers of mathematics to the satisfaction of the operator of the bus.

(*d*) If twelve or more teachers of mathematics inform Chairman Sanders at Baton Rouge that they live in or near Vicksburg, Mississippi, and that they wish special bus service on the Motor Transit line, Chairman Sanders will have notification served on the Motor Transit Co. that such service by twelve or more mathematics people is desired, whereupon, the special bus will be furnished by this company. The time of its departure from Vicksburg will be so fixed that the arrival of the party in Shreveport will be neither too late nor too early. Moreover the *special* bus will stop only at those points on the route where other mathematics people have indicated to Chairman Sanders by letter that they, too, de-

sire the special bus service. The time of the departure of the special bus from Shreveport after the mathematical meeting will be subject to the wishes of the party of twelve or more.

We have used Vicksburg and the Motor Transit Co. merely for illustration. The same terms hold for Baton Rouge and the Interurban Transportation Co., for the Yellow Bus system and DeRidder, for Lafayette and the Interurban, etc.

Bus systems, such as Hammond Line, which do not run into Alexandria, will act as feeders to the lines which do converge at Alexandria. For example, mathematics teachers desiring the special bus from Baton Rouge to Shreveport could come on a one-and-a-half fare to Baton Rouge and join the Interurban special group which would probably leave Baton Rouge near 5:30 Friday morning.

The rate on the special will also be a one-and-a-half round trip fare.

Teachers planning to go by bus to Shreveport should read the above carefully. It amounts to about this: If the teacher wishes special bus service for the trip to Shreveport on Friday morning, March 4, let him (or her) send to Mr. Sanders two or three lines expressing this desire and naming the bus system most convenient. *When* a sufficient number of teachers of mathematics make the same request naming the same line, the head of the line will be notified, and later the teachers, too, will be notified of the hour when they may expect the special to pick them up.

We Are to Be Guests of the Chamber of Commerce and Centenary College at the Friday Evening Dinner.

Those who plan to be present at the Friday evening dinner should send in their names promptly to Dean J. A. Hardin, Centenary College. It is unnecessary to notify the chairman at Baton Rouge. Notice *of intention to be present at the Friday evening dinner* should be sent by the teacher directly to Dean J. A. Hardin, Centenary College, Shreveport.

HOTEL RATES

Hotel Youree: Single rooms with bath $2.50 to $3.50.
Hotel Washington. Same.
Hotel Jefferson. Same.

TO ALL THE TEACHERS

If possible be in Shreveport by 12:00 M. Friday. From 12:00 M. to 3:00 P. M. Friday is the social period. The mathematical exhibit may be seen then. Centenary may be seen then. Transportation from the College to Hotel Youree for the Friday evening dinner will be made easy for all.

FINAL WORD

Mathematics teachers! *Go to this meeting*! *Go, if possible regardless of the cost.* Your superintendent, your principal, or your president will help you to go. The two days spent in taking in this mathematical program—the strongest ever presented in the southwest—will be worth a month of teaching and study, and will furnish inspiration to last not a year—but a life time!

S. T. SANDERS,
Chairman, L. S. U.

MATHEMATICAL EXHIBIT TO FEATURE SHREVEPORT MEETING

In order to make the coming Shreveport meeting of the M. A. of A. more interesting and enhance the benefits that may be derived therefrom, it has been decided to have an EXHIBIT of the original researches and textbooks by the mathematicians of Louisiana and Mississippi. To make this exhibit more interesting and also to get a better glimpse of the scientific activity in the two States, an appeal is also being made to the chemists and physicists to send in their published work for the same purpose—especially those papers with a strong mathematical element in them.

A circular letter has been sent out to all mathematicians, physicists and chemists of the two States. An appeal is also made at this time to all members of the M. A. of A. to send in their published work (including textbooks), and to encourage their friends to do likewise. Since there is so little time before the meeting takes place, those in charge of the Exhibit strongly urge the scientists, especially the mathematicians, to send in their papers and textbooks at once. It is hoped that everyone will be able to come, in addition to sending in some papers for the Exhibit. In case it is impossible for anyone to come to the meeting, it is strongly urged that he send in his papers (and textbooks), resting assured that any such papers which he may send will receive the greatest care, and will be returned promptly at the conclusion of the Shreveport meeting.

Please send published papers (and textbooks) to Dr. I. Maizlish, Centenary College, Shreveport, Louisiana, who is in charge of the Exhibit.

The Franklin Printing Co.
Baton Rouge, La.

NEWS LETTER No. 6

April, 1927

LOUISIANA-MISSISSIPPI

SECTION

of

Mathematical Association of America

S. T. SANDERS, *Chairman*
Baton Rouge, La.

P. K. SMITH, *Secretary-Treasurer*
Hattiesburg, Miss.

HAL FOX, *Vice-President*
Starkville, Miss.

J. A. HARDIN, *Vice-President*
Shreveport, La.

There Should be a Thousand Members of the Mathematical Association of America in Mississippi and Louisiana

IN APPRECIATION

One hundred mathematics teachers and mathematics supporters sitting down to a dinner in Hotel Youree, Shreveport, Friday evening, March 4, marked the highest level of mathematical interest yet attained in the history of Mississippi and Louisiana. Centenary College and Shreveport Chamber of Commerce did the part of joint hosts to the mathematical visitors superbly. The entire mathematics constituency of the La.-Miss. Section is indebted to President Sexton, Dean Hardin, Professors Maizlish and Reynolds, to Mayor Thomas, Mr. Yandel Boatner and those assisting them for the effective way in which they contributed to the success of the third annual meeting of the Louisiana-Mississippi Section of the M. A. of A.

The speech of President Boatner showed, as was to be expected, keen appreciation of the part mathematics plays in the development of industrial and scientific projects.

AS PLANNED

Things moved as by previous arrangment, with almost clock-like precision. Yet, flexibility of program, social contacts and sight-seeing were elements not wanting to the occasion. The round-table discussion of Friday evening was fruitful of much that is significant. With the assistance of Miss Marie Gugle, president of the National Council of Teachers of Mathematics, who was present, a Louisiana-Mississippi branch of the Council was organized and officers were duly elected as follows: W. C. Roaten, DeRidder, La., Chairman; Miss Ida K. Smith, Meridian, Miss., Vice-Chairman; Miss Norma Touchstone, Secretary-Treasurer.

Acting jointly, the Section and the Council voted to hold their annual meetings at the same time and in the same place, the annual programs to be made out by the officials of the two organizations.

In this manner has been brought about a close official articulation of the high school and the college mathematics teachers of the two States. Properly used and steadily developed such organic association of the two groups of mathematicians is bound to have a transforming influence on the

mathematics teaching of this territory and, ultimately to be a powerful factor in deepening the public interest in mathematics, and in bringing about a more adequate rating of the value of mathematics in every scheme of education and training for citizenship. *For mathematics,* (a), *is the fundamental underpinning of every science,* (b), *is being increasingly appropriated as a necessary instrument in the so-called inexact sciences,* (c), *is an unequalled means of habituating a mind to well-ordered logical thinking, and to precise analysis.*

BUT THIS ARTICULATION OF THE TWO MATHEMATICAL GROUPS CAN BE MAINTAINED ONLY AT THE COST OF EFFORT!

The benefits are not to be realized unless certain conditions are met. Effort and struggle must be steadily put forth by an increasing number, if they are to be attained. Estimating that approximately two thousand people are teaching mathematics in the two States, it is a safe assertion that sufficiently rapid growth of the influence of the Mathematical Association of America and of the Council is not being maintained in this territory unless something like the following results are reached:

(*a*) Each week should add several new mathematics teachers to the roll of membership of Louisiana-Mississippi chapter of the Council.

(*b*) At least one new member should be added to the M. A. of A. from La.-Miss. territory every week of the year, on an average.

(*c*) In each issue of the bi-monthly news letter there should be several communications from mathematics teachers, college or high school communications aiming to stimulate mathematical interest anew, to impart valuable information of a mathematical sort, or to propose some question of mathematical interest.

(*d*) Steadily, throughout the year, there should be sent into our offices, to be added to our mailing lists, the names of mathematics teachers or mathematically interested persons.

(*e*) Money—absolutely essential to carry out every part of the Section plans—should be made available to the officials without the necessity of undue expenditure of effort. Schools, colleges, universities, mathematicians, are urged to make generous contributions to the maintenance of this

program of mathematical development in our two States, *For there is no form of university or high school or college extension work more worthy of support than the cause of mathematics and mathematics teaching!*

A LOUISIANA ACADEMY OF SCIENCE ORGANIZED

Thanks to the scholarly vision and practical promoting ability of Professor I. Maizlish of Centenary College, aided by President Sexton and far-seeing citizens of Shreveport, there was formally organized on the occasion of the La.-Miss. Section meeting in Shreveport, a Louisiana Academy of Science. The significance of such a step cannot be over-estimated. When the scientists of a State associate themselves together for the systematic development and recordation of their scientific activity and for the scientific exploitation of the State's resources, a long step has been taken in the direction of lining up with the scientific programs of the time.

Professor P. K. Smith's Impressions of the Shreveport Meeting—Jefferson Davis and Marion Counties of Mississippi Strongly Support National Council

"At first I was somewhat undecided about going to the meeting of the Louisiana-Mississippi Section of the M. A. of A., but after being informed that my friend and former teacher, Dr. H. E. Slaught, was to be present, I was sure I wanted to go.

To me the most enjoyable feature of the Shreveport meeting was the fellowship. Some people possess the idea that scientists—and mathematicians are scientists—are dry and unhuman. Throughout the entire meeting I felt the air charged with a warm friendly, brotherly feeling. I enjoyed it so much. I felt that I was in a group of brothers having a common interest in a great cause. I was quickened and gained a deeper interest in my field.

Even though one does not follow the details in some of the scholarly papers presented at a meeting of this kind no one—and I am sure I will not—should miss the inspiration of the Section meeting. I consider it a special privilege to have gotten acquainted with Dr. Reeves and Miss Gugle. Dr. Slaught is bound to inspire one when one reflects on his interest in mathematics. After all is said it helps each one of us to come in contact with people who are looking up and doing things.

On March 28th the teachers of Jefferson Davis and Marion counties of Mississippi met at the Mississippi Woman's College. I called the mathematics teachers present together and told them about the great meeting we had at Shreveport on March 4 and 5. They were interested very much. Four out of eight or ten present promised to join the Council."

PROFESSOR REEVE ON THE COUNCIL YEAR-BOOK

This is to inform the teachers of Louisiana and Mississippi that the second year-book of the National Council of Teachers of Mathematics on "Curriculum Problems in Teaching Mathematics" is now available. It can be secured from the Bureau of Publications, Teachers College, Columbia University, for $1.25 postage prepaid.

The book consists of over 300 pages divided into three parts as follows: Part I on Arithmetic, Part II on Junior High School Mathematics, and Part III on Senior High School Mathematics. Those contributing to Part I are Professors T. B. Knight, T. G. Buswell and Miss Jessie Haynes; to Part II, Professor Ralph Beatley, H. C. Barber, C. L. Thiele, and Professors David Eugene Smith and W. D. Reeve; to Part III, Professor Smith, E. R. Smith and Miss Gertrude Allen.

I hope you will help us all you can by obtaining a copy yourself and by telling your friends about it.

Yours very truly,
W. D. REEVE, Editor,
Columbia University, New York.

MISSISSIPPI COUNTIES FROM WHICH NAMES OF HIGH SCHOOL MATHEMATICS TEACHERS ARE DESIRED

Calhoun	Hancock	Leflore	Smith
Carroll	Hinds	Madison	Stone
Chickasaw	Humphreys	Marion	Sunflower
Choctaw	Issaquena	Monroe	Tallahatchie
Claiborne	Itawamba	Montgomery	Tishomingo
Clarke	Jackson	Neshoba	Tunica
Clay	Jasper	Oktibbeha	Walthall
Coahoma	Jones	Perry	Warren
Copiah	Kemper	Pontotoc	Wayne
De Soto	Lafayette	Rankin	Webster
George	Lamar	Scott	Wilkinson
Greene	Lawrence	Sharkey	Yalobusha
Grenada	Leake	Simpson	Yazoo

LOUISIANA PARISHES FROM WHICH NAMES OF HIGH SCHOOL MATHEMATICS TEACHERS ARE DESIRED

Acadia	Grant	St. Helena
Ascension	Jackson	St. James
Assumption	Livingston	Vernon
Caldwell	Orleans	Washington
Evangeline	Sabine	Winn

CONTRIBUTORS TO THE CAMPAIGN EXPENSE FUND FOR THE YEAR ENDED MARCH 5, 1927

As information due the mathematical public of our Section territory and in appreciation of their assistance we list the names of the individuals and institutions that contributed financially to the campaign expense fund.

Centenary College (Pres. Sexton)	$125.00
Tulane University (Pres. Dinwiddie)	50.00
Louisiana Polytechnic Institute (Pres. Conniff) (Institutional membership)	25.00
Blue Mountain College (Pres. Lowry)	15.00
Mississippi Woman's College (Pres. Johnson)	15.00
Mansfield College (Pres. Raulins)	15.00
Miss Mabel Hutchins (Blue Mountain)	5.00
Miss Mary Spencer (Sophie Newcombe)	5.00
Prof. W. Paul Webber (L. S. U.)	5.00
Mrs. A. P. Daspit (L. S. U.)	5.00

DESIRABLE INFORMATION

The names of the newly elected officials of our Section are printed at the head of this news letter.

Effort will be made to issue a news letter every two months.

The subsequent issues will be sent out from Hattiesburg, Mississippi, Chairman Sanders compiling and editing the material, Secretary P. K. Smith having it printed and mailed from that centre.

In this connection the following information is important:

(*a*) Moneys intended for use by the Section should be sent to Secretary-Treasurer P. K. Smith, Hattiesburg, Miss.

(*b*) Communications and letters intended for publication in the news letter should be mailed to S. T. Sanders, Chairman, Baton Rouge, La.

(*c*) Names of teachers of college, or high school mathematics, residing in Louisiana not already listed with us (see county and parish lists above) should be sent to Dean J. A. Hardin, Centenary College, Shreveport, La. If in Mississippi, they should be sent to Professor Hal Fox, Miss. A. & M. College, Starkville, Miss.

(*d*) Secondary teachers desiring membership in the National Council of Teachers of Mathematics should send their membership dues ($1.00) to Chairman W. C. Roaten, DeRidder, La., or to Miss Ida K. Smith, Vice-Chairman, Meridian, Miss., or Miss Norma Touchstone, Secretary-Treasurer, Alexandria, La.

HOW LARGE ARE SOME OF THE STATE UNIVERSITY MATHEMATICS LIBRARIES ?

University of Georgia	600 Volumes
University of Missouri	1000 "
University of Arizona	1000 "
University of Oklahoma	1000 "
University of West Virginia	1000 "
University of Florida	1000 "
University of Texas	1000 "
University of Tennessee	1200 "
University of Indiana	2500 "
University of Montana	2500 "
University of Minnesota	2700 "
University of Illinois	7000 "
University of Nebraska	8000 "
University of Iowa	9000 "

The Franklin Printing Co.
Baton Rouge, La.

NEWS LETTER No. 7.

MAY-JUNE

1927

LOUISIANA - MISSISSIPPI
SECTION

—OF—

Mathematical Association of America

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Mathematical Association of America
in Mississippi and Louisiana.

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Shreveport, La.

After a personal conference in Jackson, Mississippi, Chairman Sanders and Secretary-Treasurer Smith decided that it would be more practicable to continue sending the news letters from Baton Rouge.

A CORRECTION

In the recent News Letter we erroneously stated that the Council membership fee was $1.00 per year. Though it is probable that this error was recognized by nearly every reader, for safety's sake we hasten to correct it. *The annual fee for membership in the National Council of Mathematics Teachers is $2.00.* The payment of this sum to managing Editor Clark brings to the payer not only membership in the Council but a year's subscription to the best magazine for mathematics teachers published anywhere in the world. Any secondary teacher of mathematics, or, for that matter, any college teacher, desiring the magazine may send his or her check for $2.00 to John R. Clark, Editor and Business Manager, 425 West 123rd St., New York City.

A NATION WIDE ECHO OF THE SHREVEPORT MEETING

Readers of the *American Mathematical Monthly* who live in Louisiana and Mississippi should be gratified to find in its first article, "The Association and its Sections" words of high appreciation for the recent Louisiana-Mississippi campaign for the betterment of mathematics teaching and the promotion of mathematical interest. In Professor Slaught's fine analysis of the present status and outlook of the M. A. of A. in relation to its seventeen Sections, is evidence that the Louisiana-Mississippi Section may be considered to have done a pioneer work when it invited and secured at the Shreveport meeting an organic affiliation with it of the National Council of Teachers of Mathematics. It should be a source of satisfaction to all that other Sections of the M. A. of A. are contemplating for their own territory a similar articulation with the Council.

WE NEED FINANCIAL HELP !

Money is needed for the year's program and the need is urgent! Professor Smith of Hattiesburg, our Secretary-treasurer, is appealing to all college mathematicians who are not already members of the M. A. of A. in the two States to join at once, since apart from the other membership benefits, there would result quite a money benefit to the Section if they

should join. Every new member added to the Section pays an initiation fee of $2.00, and this fee is credited to the treasury of the Section instead of to the National organization's treasury.

Estimating that there may be 100 men and women teaching mathematics in the colleges and universities of Louisiana and Mississippi, who are not now members of the M. A. of A., if the hundred should at once become members there would be made available for use by this Section the sum of $200.00 or a total of 100 initiation fees of $2.00 each.

Why should a teacher of college mathematics anywhere continue unaffiliated with the Mathematical Association of America?

AN OPPORTUNITY

The fine start—it is only a start—which has been made in this Section territory must be followed up steadily, intelligently, vigorously, boldly—year in and year out, if mathematics is to come into its proper place in the schools and the colleges of our Section territory! True it is that the excellent start presents the richer opportunity, but a present opportunity amounts to little if it is not seized and utilized.

A GLORIOUS CAUSE IS OURS !

Mathematics is queen of the sciences and we are her humble devotees! Four dollars a year for the privilege of keeping up with one's professional field is a small sacrifice when viewed in the light of benefits received. But when it is considered that the field is mathematics, mathematics the science of all sciences, the universal science, the supreme medium of instinctive expression for the greatest minds of history—then positively insignificant does such a sacrifice seem. Four dollars a year, 33⅓ cents a month, a penny a day! Yet within Louisiana and Mississippi must be hundreds of men and women professionally given over to the teaching of mathematics, but not members of the Mathematical Association of America!

Neither the teaching nor the study of mathematics is a game of solitaire! Certainly the secondary and the college mathematicians cannot ignore the associative and cooperative factors of their professional responsibilities.

Those Superintendents of Louisiana Parishes and of Mississippi Counties who have not responded to our requests for the names and addresses of High School Mathematics Teachers are again earnestly urged to give us this information!

The news letter should go to all mathematics teachers in the two States, but this is impossible unless we have their names and the addresses on our mailing lists. We have been disappointed at the lack of response of so many of the county and parish superintendents to our repeated requests for such information. It is information which could be easily furnished and once furnished might be the means of the Section's contributing an effective service to the cause of mathematics teaching at points of its territory not hitherto reached by its influence. All superintendents of the two States are receiving the News Letters.

The floods have brought devastation to many of us. Therefore should we "carry on" the more vigorously our usual school programs!

The summer schools of Louisiana-Mississippi territory will soon begin to function. Many of the high school mathematics teachers will be registered for courses in the various normal colleges and universities. Those who do so will have excellent opportunity to acquire definite information from mathematics instructors about membership in both the National Council of Teachers of Mathematics and the Mathematical Association of America. The opportunity will be equally present, on the other hand, for college and normal mathematics teachers to point out to ambitious and interested students of mathematics the mathematical vistas that are certain to unfold to them on entering the doors of these two great societies of mathematical workers.

We earnestly invite communications from all live teachers and students of mathematics in the Louisiana-Mississippi territory! We want none from dead ones!

The responsibility is great. Four men unassisted cannot do this job. We are busiest of the busy. Six live-wire notes each bi-monthly period, "briefing" a successful experiment in teaching geometry, or proposing a vexatious problem, or

describing a new solution of an old one, or offering an interesting bit of mathematical history, or calling Louisiana-Mississippi's attention to some inspiring article of the *Mathematics Teacher*, or commenting on an article in the *Monthly* or furnishing a list of new members of the N. C. of T. of M., or the M. A. of A. would be of inestimable assistance and encouragement not only to the official family of the Section, but what is vastly more important, to the host of other mathematics people who work in our territory and receive our News Letter.

SOME RECENT REMARKS ABOUT MATHEMATICS

"To the influence of this paper ('On the Equilibrium of Heterogeneous Substances' by Josiaph W. Gibbs) it is largely due that chemistry, then an almost unmathematical science, has so developed that the mathematical equipment now required by the student of chemistry differs but little from that which is requisite for the student of physics."

From an address by H. B. Williams, on "Mathematics and the Biological Sciences," as published in May-June Bulletin of American Mathematical Society.

"It is less well understood that not alone the chemist and the physicist, but the biologist as well must be able to read mathematical papers if he is not to be cut off from the possibility of understanding important communications in his own field of science."—*H. B. Williams.*

"There are probably not a few professional mathematicians whose inherited capacity (in mathematics) is actually less than that of men who have quit the subject in despair. * * * * It seems that the lesson to be derived is that the awakening of a real interest on the part of the student in his subject of study is quite as necessary for his success as is the possession of innate capacity."—*H. B. Williams.*

"It was my privilege to work for six years with a really great teacher of geometry and Latin, Principal Chester T. Lane, Ft. Wayne, Indiana. At Purdue University they used to say they could detect Mr. Lane's students in a class of one hundred by the way they talked mathematics. He taught about thirty-five years in Ft. Wayne and died there. During the last years of his life he received many letters of appreciation from successful men. They all said: 'You taught me how to work, how to read the printed page, and the joy of achievement'."

From H. D. Merrell's "Fads and Plane Geometry," as published in the January *Mathematics Teacher*.

"Mathematical reasoning is the only true conservative influence in the world today. It keeps us from radical ideas in all fields of thought. Bolshevism and perpetual motion and sometimes matrimony all alike succumb to mathematical calculation."

From Harvey A. Neville's "Mathematics and Science," as published in the January *Mathematics Teacher*.

"The proud citizens of many cities of ancient Greece sacrificed a hundred oxen to the Olympian gods whenever one of their fellow citizens had discovered a new theorem in geometry."

From M. I. Pupin's "Higher Endeavor in Science," as published in *Science*.

"As for the importance of the calculus, let us reiterate that science, engineering, and industry are demanding more and more calculus and that America the greatest manufacturing and engineering nation in the world, needs more trained mathematical minds; as a powerful mathematical tool, it shows the student the far-reaching influences of mathematics upon which the development of civilization has always been dependent; it develops a kind of thought in its dealings with small changes in related quantities that is useful in considering everyday problems."

From Susie B. Farmer's "The Place and Teaching of Calculus in Secondary Schools," as published in April *Mathematics Teacher*.

WHAT ANNUAL APPROPRIATIONS FOR MATHEMATICAL LIBRARY AND JOURNALS ARE HAD BY SOME OF OUR UNIVERSITIES AND COLLEGES ?

Texas A. & M.	$ 150	per year
University of Minnesota	180	" "
University of Ohio	250	" "
University of Kentucky	300-500	" "
University of Colorado	500	" "
University of Washington	500	" "
University of Indiana	550	" "
University of Wisconsin	600-800	" "
University of Illinois	800	" "
University of Michigan	1150	" "

COMMUNICATIONS

(From the President of Louisiana-Mississippi Chapter of the National Council of Mathematics Teachers.)

Dear Prof. Sanders:

I am greatly interested in the success of this movement of the Mathematics Teachers in the secondary schools of the two States, and it shall be my pleasure to do what I can to make the meeting for next year a success. I wish to send something for the news letter at an early date. I believe it will be wise to get in touch with the teachers who should be interested as soon as they are located for next year's work, and I intend to undertake such a campaign. During the summer vacation they will be scattered to the four winds but when they "settle" I think we can reach them.

Yours truly,

W. C. ROATEN.

(From the President of the National Council of Teachers of Mathematics.)

Mr. S. T. Sanders,
Baton Rouge, Louisiana.

My dear Mr. Sanders:

I just received your news letter number six and am delighted to know that you are still carrying on the propaganda in the interests of the Mathematical Association of America and the Louisiana-Mississippi branch of the National Council of Teachers of Mathematics.

One of the very delightful and interesting features of our trip South was our stay in Shreveport and meeting our fellow-workers in the field of mathematics from these two States.

Please accept our best wishes for a successful administration and continued growth of both organizations.

Very cordially yours,

MARIE GUGLE,
Assistant Superintendent.

The Franklin Printing Co.
Baton Rouge, La.

SEPTEMBER, 1927

LOUISIANA - MISSISSIPPI SECTION

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Mathematical Association of America

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LOUISIANA-MISSISSIPPI SECTION,
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LOUISIANA-MISSISSIPPI CHAPTER
NATIONAL COUNCIL OF TEACHERS OF MATHEMATICS

W. C. ROATEN, *Chairman,*
DeRidder, La.

MISS IDA K. SMITH, *Vice-Chairman,*
Meridian, Miss.

MRS. LONGMIRE, *Sec'y-Treas ,*
Alexandria, La.

COOPERATING IN THE NAME OF MATHEMATICS

The recent joint action of the La.-Miss. Section and the La.-Miss. branch of the National Council of Teachers of Mathematics justifies the use of the News Letter in promoting the interests of both these organizations. The joint action alluded to—taken at the Sherevport meeting in March—provided for the utmost degree of cooperation between the college and the secondary teachers of mathematics in Mississippi and Louisiana. Speaking specifically, the two groups voted to have their annual meetings at the same time and in the same place, the programs to be joint to the extent that both secondary and college elements are to be featured.

Because of this formally voted cooperation, we are printing in this issue of the News Letter the list of officers of the Council branch for Louisiana-Mississippi territory.

TREASURER SMITH IN ACTION

Pursuant of plans agreed upon in a conference held in Jackson, Mississippi, between Chairman Sanders, Sec'y-Treas. Smith and Professor Mitchell of Millsaps College, Mr. Smith has taken complete charge of the money end of our mathematical campaign. We print below his letter of appeal to the college and university presidents of our Section territory. He has already secured contributions from some of the administration heads and hope is entertained that all of them can be induced to furnish a measure of financial aid to the cause of mathematical expansion—a cause of the highest educational value.

ALL MATHEMATICAL ORGANIZATIONS ARE AIDS TO SCHOOL AND COLLEGE EFFICIENCY---WHY NOT FINANCIAL AID FROM SCHOOLS AND COLLEGES TO MATHEMATICAL ORGANIZATIONS ?

1. Mathematics is a fundamental part of every high school, college and University curriculum.

2. Hence the mathematics teacher and mathematician are necessary to the schools and colleges.

3. The efficiency of the mathematics teacher and the mathematician, and hence, the efficiency of the mathematical departments of high schools, colleges and universities, are

vitally dependent on the activity of the Mathematical Association of America, the American Mathematical Society, and the National Council of Teachers of Mathematics.

4. But the burden of financing these organizations has in the past been on the shoulders of the individual mathematics teachers and mathematicians, and not on the high school, college, and university administrations.

5. If even half of this burden could be taken over by the schools and colleges, the outlook for increased efficiency in the profession of mathematics teaching would be immeasurably improved.

MEMORANDUM

Membership in the Mathematical Association of America costs $4.00 per year, plus an inititation fee of $2.00. In case the applicant for membership is a high school teacher in Louisiana or Mississippi, the initiation fee, may, on the expressed desire of the teacher, be used to pay for one year's membership in the National Council of Teachers of Mathematics. Membership in the M. A. of A. carries with it a subscription to the *American Mathematical Monthly*. Membership in the National Council of Teachers of Mathematics carries with it a subscription to the *Mathematics Teacher*.

W. D. Cairns, Oberlin, Ohio, is the Secretary-Treasurer of the M. A. of A.

WANTED FOR PUBLICATION IN THE NEWS LETTER: NEWS AND NOTES FROM COLLEGE AND SCHOOL MATHEMATICS DEPARTMENTS

The contents of the News Letter would be improved and its value as a stimulus to mathematical interest and activity increased, if material under the following heads could be furnished us from month to month.

(a) Names of mathematics teachers not already on our mailing lists.

(b) Names of mathematically interested individuals whether teachers or not, for addition to the mailing lists.

(c) Reports from college mathematics departments giving (1) the number of students electing advanced mathematical courses, (2) evidences of a growth of interest in mathe-

matics, (3) observations on the disciplinary values of mathematics (4) description of methods *successfully* tested out in the mathematics class room.

(d) (1) New solutions of old problems. (2) Problems offered for solution.

(e) Clippings of value from the mathematical journals.

(f) Letters suggesting ways and means for our campaign of mathematical expansion.

THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE MEETS IN NASHVILLE, DECEMBER 26, 27, 28.

A letter to Chairman Sanders from Professor H. E. Buchanan of Tulane University contains the following paragraph: "I wish to suggest that in your next News Letter you call attention to the Nashville meetings, December 26, 27, 28 of the Association for the Advancement of Science. Both the American Mathematical Society and Mathematical Association of America meet there too. It is the first time they have ever come that far South, and it is up to us (the South) to prove that they ought to come again."

Professor Buchanan is a member of the committee on arrangements for this meeting.

ABOUT MATHEMATICS AND ITS TEACHING

"Many circumstances operate to hinder the easy and full grasp of mathematics in its simplicity and certitude, not the least of which is the impossibility of adapting the instruction fully to the needs of every individual, and the serious difficulties which even a slight overtaxing of the powers of the individual may cause. But when any considerable proportion of the earnest pupils of a class are floundering along in an uncertainty verging on despair, the caution signal is flying clearly for the teacher. It behooves him, believing in the simplicity and certitude of mathematics himself, to ask himself whether he cannot, despite the restrictions consequent upon teaching many pupils at a time, make some modification in his mode of instruction which will help the majority, if not all, of the struggling pupils into the land of mathematical freedom. This is one of the chief problems, yes, the chief problem, confronting the thoughtful student of the teaching of mathematics.

For mathematics properly studied, tends to strengthen, does strengthen the power of thinking independently and accurately."—From J. W. A. Young's *The Teaching of Mathematics.*

"With respect to vitality and progressiveness it may be confidently said that mathematics is not surpassed by any branch of science. Its developments in our day proceed so rapidly and in so many directions that the ablest men, being unable to follow all the developments, are obliged to specialize within the general field. Ours is indeed the golden age of mathematics. Not less than eight international congresses of mathematicians were held prior to the World War. More than 500 scientific journals are devoted in part, and more than two score others are devoted exclusively, to mathematical publications. As many as 2,000 mathematical books and memoirs drop from the press in a single year. In all of the great culture nations are found flourishing mathematical societies. The American Mathematical Society, which is primarily devoted to research, and publishes two journals, has about one thousand members. The membership of the Mathematical Association of America, which publishes one journal, is still larger. And in our country, as in others, there are numerous organizations aiming at improvement in the teaching of elementary mathematics."—From C. J. Keyser's "Mathematics as a Career," as reprinted from *The Scientific Monthly.*

"In all the foregoing it is my contention that pupils in the junior high school grades can learn a great deal more mathematics than is commonly supposed to be the case. Whether teachers in general can teach as much mathematics as their pupils can learn is quite another question. I believe that they can. In order to do so they should become thoroughly familiar with the various subjects which they are to teach and then should go even further to gain the necessary background and perspective. All this they can do under adequate guidance. It is not fair, however, to expect a teacher to do this so long as she is responsible for the proper teaching of several other subjects, each of which doubtless has its own exacting demands if the pupils are to receive their due. If the former eighth grade teacher has a liking for mathematics and likes

to teach it, it would seem wise to encourage her to master this subject and to expect her to teach seventh and ninth grade classes in mathematics also, shifting some of her history or English classes to other teachers who prefer to teach those subjects and are glad to be relieved of mathematics. In this way the pupils would get better instruction in all subjects. This need not, and should not, mean as thorough departmentalization as obtains in the bigger senior high schools; for the pupil needs to be introduced gradually to a school so organized."—From a paper contributed by Ralph Beatley to *The Second Year Book* of the National Council of Teachers of Mathematics.

LETTERS

President_____

Dear Sir:

Mathematics is today a beautiful science in itself. It is especially to be recognized as an indispensable and dynamic instrument in the hands of the engineer, physicist and chemist.

Recently there has been organized in Mississippi and Louisiana a local section of the Mathematical Association of America. We are now sending out to the high school and college teachers of the two States a news letter of a few sheets. Through this letter we are attempting to attain a two-fold objective; first, more co-operation and understanding between college and high school mathematics in the two States; second, to create a greater interest in this basic science.

Our membership is limited at present and as a consequence we haven't enough funds to carry out our program. In time we feel that we shall be able to so interest such a large number of teachers of both classes that we shall be able to handle our financial problem. Our expense will be from five hundred to a thousand dollars depending upon the expansion of our news letter. In time we hope to expend this letter into a small magazine.

We, the officers and members of the Louisiana-Mississippi section of the Mathematical Association of America, feel that we have a real program of extension work on foot; a worthwhile program which will help the college and high school teachers of the two States. In helping the teachers to produce better results we feel that we shall be able to do real service. The presidents to whom we have appealed have contributed from $15.00 to $125.00. We should deeply appreciate your support. Especially we should appreciate your opinion of our efforts.

Please address me, Station B, Hattiesburg, Mississippi. Make out any checks to P. K. Smith.

Sincerely yours,

P. K. SMITH, *Sec'y-Treas.*,

of the La.-Miss. Section Mathematical Asso. of Am.

STATE OF LOUISIANA
DEPARTMENT OF EDUCATION
BATON ROUGE

September 9, 1927.

Professor S. T. Sanders, *Chairman*,
Louisiana-Mississippi Mathematical Association,
Baton Rouge, Louisiana.

Dear Mr. Sanders:

We are living in an age of machinery. Both in the scale of activities and in their variety, no age can campare with the present.

That we may successfully carry on the gigantic enterprises of modern civilization imposes the necessity of increased facility and increased accuracy in our dealings with quantitative relations.

Those who take directions from the leaders must be able to use with ease and accuracy the well-known mathematical and quantitative means. The leaders themselves must be so equipped that they will be able to apply to the new projects and designs all that is known in regard to all branches of mathematics. It is fortunate that mathematicians themselves have recognized this need clearly enough to organize their forces for promoting the intensive study of mathematics in the high schools and colleges of the country.

Yours very truly,

J. E. LOMBARD,
Director of Certification.

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